SITUATION REPORT NO. 34
INCIDENT NO. 2000-016
DATE: December 8, 2000 TIME: 9:00 a.m.

TO: Governor Edward T. Schafer
State Capitol
Bismarck, N.D. 58505

1. NATURE OF DISASTER: Flooding, ground saturation and storms.

2. DEATHS AND INJURIES: No change from previous reports.

3. DAMAGES: Unusually high levels of precipitation this fall caused rivers to approach flood stage and filled potholes and sloughs throughout North Dakota. State Water Commission (SWC) engineers, concerned that a wet fall will increase the chance for a spring flood, will be monitoring snow pack as it accumulates this winter. Because of this fall's high precipitation levels, the ground was wet at freeze up. Soil moisture, snow pack and its water content, and the rate of melt, are contributing factors in flooding. During late October-early November, the Red River of the North was flowing at record levels. As an example, river flow at Grand Forks measured 19,100 cubic feet per second (cfs) on November 10, compared to 5,200 cfs, which was the previous largest flow for November. Devils Lake rose 0.15 feet last month, representing an 18,000-acre foot volume increase, the largest such increase in November since 1993.

   During September through November, fall soil moisture was generally above normal for western and central North Dakota, according to hydrologists at the Bismarck Office of the National Weather Service (NWS). Only a small portion of southwestern North Dakota had below normal moisture. Three-month precipitation totals varied from two to seven inches, with the heaviest amounts in McKenzie, Williams, Mountrail, McLean, Sheridan, Wells and Foster counties. These amounts were 150 to 200 percent of normal. These findings are supported by the results of the airborne soil moisture data using gamma radiation. These flights are conducted and the information compiled by National Operational Hydrological Remote Sensing Center (NOHRSC) in Chanhassen, MN. In early November, soils (upper 20 centimeters or eight inches) were nearly saturated in the upper end of the James River Basin, then drying to the west. The lower end of the Souris River Basin drainage area was above normal, whereas the upper end was near normal. The Missouri River Basin was very wet in central but nearly normal in western North Dakota. By comparison, 1999 fall moisture totals were only two to four inches, or 50 to 75 percent of normal, over the majority of west and central North Dakota.

During November 9-15, the NOHRSC of the NWS conducted an airborne gamma radiation soil moisture survey over the Red River and Minnesota River basins. As a result of the late fall precipitation, the airborne survey data indicated comparatively wet soil moisture conditions for the upper eight inches of soil for the northern regions of the survey area. During a comparatively dry fall, soil moisture can range from 10 to 20 percent by weight for the upper eight inches of soil. In a more normal fall, soil moisture can range from 25 to 35 percent. Soil moisture conditions were estimated to be comparatively high and range from 50 to 80 percent soil moisture.

Fall precipitation amounts were generally above normal over the Devils Lake and Red River basins, according to reports issued by the Grand Forks Office of the NWS. Precipitation reports for September and October indicated that the following amounts of rain fell in the Devils Lake basin: Devils Lake, 4.4 inches (normal is 3.08 inches); Minnewaukan*, 4.52 inches; and Webster*, 2.91 inches. Precipitation levels for the two-month period for Red River Basin stations are as follows: Adams, 3.35 inches (normal is 2.97 inches); Casselton*, 5.73 inches; Grafton, 2.82 inches (normal is 3.04 inches); Grand Forks, 4.58 inches (normal is 3.53 inches); Pembina, 3.23 inches (normal is 3.29 inches); and Wahpeton, 4.53 inches (normal is 4.0 inches).

* *Normal precipitation amounts are not available for these sites.*

The Stutsman County Emergency Manager reported that continued rain and snow storms this fall and early winter kept soils in the upper James River Basin saturated into freeze-up and contributed to increased flows into both the Pipestem and Jamestown Reservoirs. Since September, new inflow records have been set at both Pipestem and Jamestown Dams. The U.S. Army Corps of Engineers (USACE) did not reach the target date of November 15 for wintertime pool elevations because of the runoff. On November 27, the pool elevation of 1,427 feet was reached at Jamestown Reservoir, where outflows were adjusted from 400 cfs to 150 cfs to match inflows during the winter months. The Pipestem Reservoir has approximately two feet of water remaining in its flood control pool, and water is being released at a rate of 400 cfs. Once the water is released within seven to 10 days, the wintertime pool elevation will measure 1,442.5 feet. Outflows will be adjusted to match inflows, which are currently 110 cfs. Once the pool level is attained, both dams will have a combined release rate of 280 cfs.

4. RESOURCES:

LOCAL: No change from previous reports.

STATE: No change from previous reports.

FEDERAL: No change from previous reports.

5. VOLUNTEER ACTIONS: No change from previous reports.

MAJOR ACTIONS:

Program Updates for FEMA-1334-DR-ND

Two projects to mitigate flood damages within the city of Fargo have been submitted for funding to FEMA through the Hazard Mitigation Grant Program (HMGP). Environmental assessments will be conducted. Earlier this fall, the State Hazard Mitigation Team reviewed and prioritized 30 applications totaling over $30 million; 14 projects were selected to receive $6.8 million in HMGP funding, which is currently available.

This year, Job Service North Dakota anticipates paying $8 million in Disaster Unemployment Assistance (DUA) to farmers, ranchers, farm workers, migrant workers and other self-employed individuals who have lost income because of disaster conditions. To date, Job Service has received 5,455 claims and paid $7,707,709 in DUA benefits. While the application period has ended, Job Service will process claims through December 30. Applicants are eligible for benefits for the period of April 9 through December 30.

Expenditures for the Public Assistance (PA) Program are estimated at $37,307,011. The program has approved 153 eligible requests for public assistance from local governments, state agencies and private non-profit organizations. To date, $13,880,797 has been paid to applicants.

9,698 North Dakotans have registered with FEMA Teleregistration Center for individual assistance programs. Individual program expenditures are as follows:

- The Disaster Housing Program has received 8,072 applications. To date, FEMA has paid $16,121,377 in housing benefits. Program expenditures for this year are estimated at $16,200,000.
- The Individual and Family Grant Program, administered by North Dakota Emergency Management, has approved 1,815 applications and more than $3,471,603 in benefits. Program expenditures for this year are estimated at $3,745,000.
- The Small Business Administration (SBA) has approved 1,032 loans for disaster victims and disbursed $12,561,600. Program expenditures for this year are estimated at $8,854,400 for home loans, $1,731,400 for business loans and $552,500 for economic injury disaster loans.

7. ASSISTANCE NEEDED: No change from previous reports.

8. OUTSIDE HELP ON SCENE: No change from previous reports.

9. OTHER: FEMA has developed a web page with cleanup and recovery information. The page is located at:
http://www.fema.gov/reg-viii/floods.htm.

Situation Reports published by North Dakota Emergency Management are posted on the Division's Internet home page. The address is:
http://www.state.nd.us/dem.

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Douglas C. Friez, State Director